



#5/Reg for
Examination.
V. B. B. B.
4/15/03

Docket No. 740819-595

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Masayuki ENDO et al.) Examiner: Nguyen, Lam S.
Serial No. 09/921,921) Group Art Unit: 2853
Filed: August 6, 2001) Confirmation No. 8577
For: ELECTRON BEAM ALIGNER,)
OUTGASSING COLLECTION METHOD)
AND GAS ANALYSIS)

REQUEST FOR RECONSIDERATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action dated January 17, 2003, reconsideration in view of the following comments is respectfully requested. Claims 1-6 are pending.

The Office Action rejects claims 1-6 under 35 U.S.C. §102(b) as anticipated by JP07153662 to Toshihiko (hereinafter "Toshihiko"). This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, an electron beam aligner comprising an electron beam irradiation means for fully irradiating a resist film with an electron beam, and a gas collection means for collecting an outgassing released from the resist film when irradiated with the electron beam.

Claim 3 recites, *inter alia*, an electron beam aligner comprising an electron beam irradiation means for fully irradiating the resist film with an electron beam, and a gas analysis means for analyzing a constituent of an outgassing released from the resist film when irradiated with the electron beam.

Claim 4 recites, *inter alia*, an outgassing collection method comprising the steps of fully irradiating the resist film with an electron beam, and collecting an outgassing released from the resist film when irradiated with the electron beam.

RECEIVED
APR 14 2003
TECHNOLOGY CENTER 2800

Claim 5 recites, *inter alia*, an outgassing analysis method comprising the steps of fully irradiating the resist film with an electron beam, collecting an outgassing released from the resist film when irradiated with the electron beam, and analyzing a constituent of the collected outgassing.

Claim 6 recites, *inter alia*, an outgassing analysis method comprising the steps of fully irradiating the resist film with an electron beam, and analyzing a constituent of an outgassing released from the resist film when irradiated with the electron beam.

Thus, Applicants respectfully submit that the outgassing released from the resist film when irradiated with the electron beam can be collected and the constituent of the outgassing analyzed.

In contrast, Toshihiko is directed toward a means for and a step of drawing a device pattern on a resist film using an electron beam. However, Applicants respectfully submit that Toshihiko at least fails to teach, suggest or disclose the means for nor the step of *fully irradiating* the resist film with the electron beam as claimed.

Specifically, Toshihiko discloses a means for and a step of collecting and analyzing an outgassing generated from the resist film when performing a heat treatment after drawing the device pattern on the resist film, in other words PEB. However, Toshihiko at least fails to teach, suggest or disclose the means for and step of collecting or analyzing the outgassing generated from the resist film when the resist film is *fully irradiated* with the electron beam. Stated in another way, Toshihiko fails to teach, suggest or disclose collecting or analyzing the outgassing generated from the resist film during exposure.

Accordingly, Applicants respectfully submit that Toshihiko fails to anticipate claims 1-6 for at least the deficiencies noted above. Furthermore, claim 2 is also not anticipated by Toshihiko for at least the reasons outlined above and the additional feature(s) it recites. Withdrawal of the rejection of these claims under 35 U.S.C. §102 is respectfully requested.

Applicants respectfully submit the application is in condition for allowance. Favorable reconsideration and prompt allowance are respectfully requested.

Docket No. 740819-595

Serial No. 09/921,921

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



Jason H. Vick

Registration No. 45,285

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone: (703) 770-9300
Fax: (703) 770-9400

JHV/adc